

Docket No. 500.36322CX1
Serial No. 09/621,054
Office Action dated October 4, 2006

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REMARKS

By the present Amendment, claim 12 has been amended. Claims 11, 13, and 14 have been withdrawn from further consideration. Claim 15 is newly presented for consideration. Accordingly, claims 12 and 15 remain pending in the application. Claim 12 is independent.

In the Office Action of October 4, 2006, claim 12 was rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,654,902 Issued to Scheidt et al. ("Scheidt"). Regarding this rejection, the Office Action indicates that Scheidt discloses a method for recyclable components that comprises most of the features recited in independent claim 12. For example, the Office Action indicates that Scheidt discloses treating the discarded article on the basis of a selected treatment procedure for separating parts incapable of being treated by facilities installed in a treatment-entrusted factory which is in charge of treatment of the discarded article. Scheidt is indicated as disclosing the feature of monitoring a situation in which the discarded article is being treated; reading out alternative treatment procedures for a same purpose as the selected treatment procedure, and reading out information concerning facilities required for executing the alternative treatment procedure in case it is decided that the treatment situation requires a different treatment.

The Office Action further indicates that Scheidt discloses selection of alternative treatment procedures capable of being carried out by facilities installed in the treatment entrusted factory, and treating the discarded article in accordance with the selected alternative treatment procedure. The Office Action admits that Scheidt does not specifically disclose checking of disassembled articles to determine whether the relevant work has been completed. However, this is considered to be obvious because Scheidt discloses checking of the disassembled component parts

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through a medium of a detecting means in order to determine whether the particular treatment procedure has been fulfilled. Applicants respectfully disagree and traverse this rejection as set forth below.

At the outset, Applicants note that independent claim 12 has been amended to better clarify the features of the invention that are not shown or suggested by Scheidt. As amended, independent claim 12 defines a treatment processing method for discarded articles that comprises the step of:

treating the discarded article on the basis of a selected treatment procedure for separating parts incapable of being treated by facilities installed in a treatment-entrusted factory which is in charge of treatment of said discarded article, or for segregating harmful or hazardous material to be separated;

monitoring a situation in which said discarded article is being treated and checking whether relevant work has been completed or will be able to be performed in conformance with the selected treatment procedure through a medium of a detecting means;

reading out, from information concerning separation procedures for taking out the parts, harmful or hazardous material from the discarded article, the information concerning the facility or equipment demanded for the execution of the separation procedures and the information concerning equipment or facilities installed in the treatment-entrusted factory, in case it is decided that said treating situation suffers abnormality;

determining an alternative treatment procedure serving for a same purpose as selected treatment procedure on the basis of the information acquired in the reading out step;

determining the position or location at or along which the parts, harmful or hazardous material can be cut and separated from said discarded article without being impaired on the basis of the location information and the dimensional information concerning the parts, harmful or hazardous material, in case it is decided that the candidate for the alternative treatment procedure is not found;

treating said discarded article in accordance with said determined alternative treatment procedure or separating the parts, harmful or hazardous material by cutting.

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According to independent claim 1, it is first determined whether the discarded article will be treated or segregated. The treatment is performed according to a treatment procedure for separating parts incapable of being treated within the facilities of the treatment entrusted factory. Alternatively, it is determined whether the discarded article contains harmful or hazardous material to be separated. The treatment step is monitored in order to determine whether the relevant work has been completed, or will be able to be performed in conformance with the selected treatment procedure. See Fig. 23 and corresponding description. Information is read out concerning separation procedures for taking out the parts (harmful or hazardous material from the discarded article), the facility or equipment necessary for executing the separation procedures, and information concerning the equipment or facilities installed in the treatment entrusted factory in the event it is determined that the selected treatment procedure cannot be performed. Next, an alternative treatment procedure is determined to serve the same purpose as the selected treatment procedure based on information acquired from the reading step. Next, a position (or location) is determined where the parts corresponding to harmful or hazardous material can be cut out and separated from the discarded article without being impaired, based on the location information and dimensional information for the parts, in the event that a candidate for alternative treatment procedure is not found. The discarded article is subsequently treated in accordance with the determined alternative treatment procedure or by separating the harmful or hazardous parts from the material via cutting.

Applicants' review of Scheidt suggests that there are features which differ from those recited in independent claim 12. According to Scheidt, the information stored in memory corresponds to the amount of stress to which each of the structural

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elements is exposed, as detected by the sensors. For example, this information can correspond to maximum/minimum temperatures, maximum acceleration, minimum power consumption, maximum voltage, maximum humidity exposure, short circuiting that has occurred with respect to the component, the operation hours of the component, outgassing, emission, electromagnetic radiation, etc. See column 2, lines 54-61. These values are recorded and retrieved during the recycling process in order to evaluate the quality and commercial value of each structural component.

Scheidt also discloses storage and retrieval of passive data and supplemental data into the memory. Examples of passive data include information concerning the position of each structural element, manual for disassembling the element, or manufacturing data for the component which has been set by the factory. Supplemental data can include distribution and sales data which was previously determined for the component, history of repair and maintenance service data, and data regarding the technical conditions for product guarantee in order to protect against unjustified claims. See column 3, lines 37-45. Scheidt also stores manufacturing data for the components that can include, for example, model name or number, the type of plastics and adhesives used in the component, location of built-in hazardous materials, official life of the component, manufacturing history, testing history, fault reporting history, etc. However, this information is suggested as being useful for deciding the interchangeability of certain components within the field of service. Scheidt suggests that the information can be utilized to manage dismantling and disposition of the articles. However, Scheidt is completely silent on exactly how this information can be used, in particular, with respect to identifying specific and alternative treatment processes.

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In contrast, the instant invention retrieves information that is appended to the article being processed. This information can include dimensional information for the article, information regarding structural components for the article, part numbers, quality of material information, location of parts in the article, and information regarding dismantling procedures. Additionally, the information retrieved can come from a processing system for the discarded article and equipment installed in the factory for carrying out the processing. Furthermore, the information can identify conditions of the material which can be processed within the facility. None of this information is disclosed, or even suggested by Scheidt.

The data retrieved is combined to generate a procedure to be carried out within the factory. As can be appreciated, the mere fact that a procedure is determined to be operable within the factory does not mean it can actually be carried out. Thus, according to independent claim 12, each operation is monitored as it is carried out in order to identify any process that cannot be completed and to provide alternative procedures for continuing and/or finishing the treatment processing. More particularly, the instant invention monitors the overall process to determine whether an operation cannot be carried out. If it is determined that an operation cannot be completed, then the information is retrieved and reexamined so that an alternate treatment can be identified. If an alternative treatment cannot be determined, then various parts from the article are identified to be separated and discarded. The instant invention also determines the appropriate time within the treatment process to separate the objects that cannot be treated without destruction.

Scheidt does not appear to provide any disclosure, or suggestion for a processing method of discarded articles as set forth in independent claim 12. It is

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therefore respectfully submitted that independent claim 12 is allowable over the art of record.

Claim 15 depends from independent claim 12, and is therefore believed allowable for at least the reasons set forth above with respect to Independent claim 12. In addition, this claim introduces novel elements that independently render it patentable over the art of record.

For the reasons stated above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a Notice of Allowance is believed in order, and courteously solicited.

If the Examiner believes that there are any matters which can be resolved by way of either a personal or telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

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AUTHORIZATION

Applicants request any shortage or excess in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged or credited to Deposit Account No. 01-2135 (Case: 500.36322CX1).

Respectfully submitted,

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